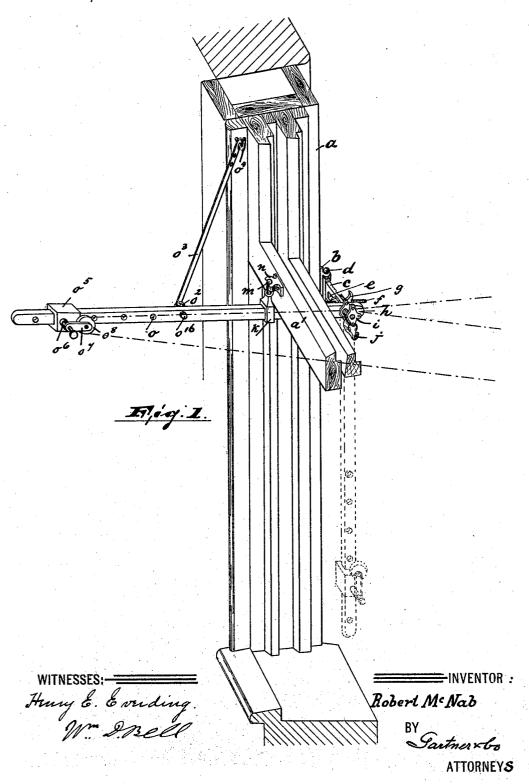
R. McNAB.

ADJUSTABLE SAFETY CLOTHES LINE SUPPORT.

No. 515,355.

Patented Feb. 27, 1894.



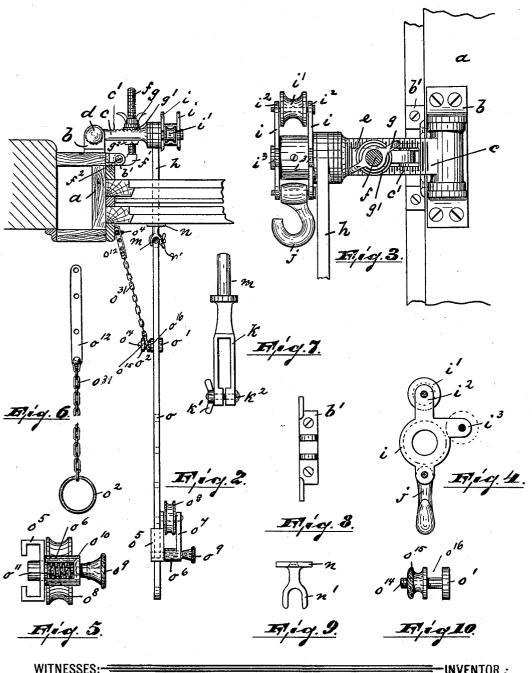
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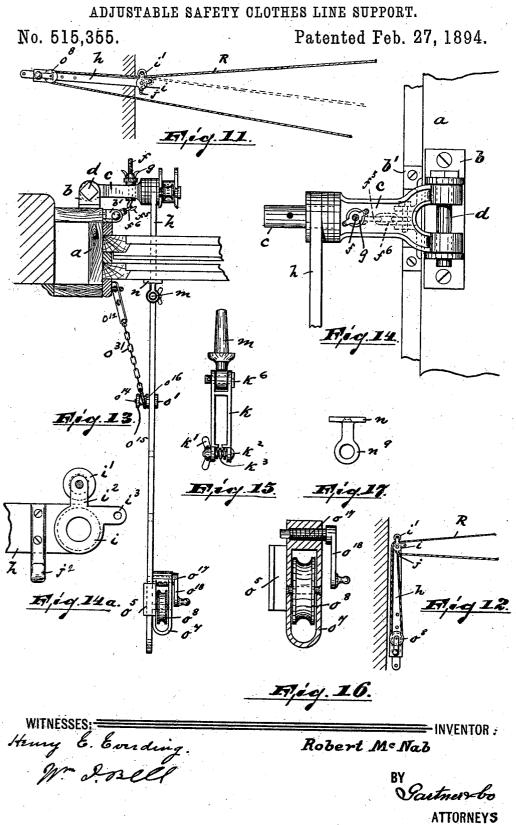


WITNESSES: Everding.

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UNITED STATES PATENT OFFICE.

ROBERT MCNAB, OF PATERSON, NEW JERSEY.

ADJUSTABLE SAFETY CLOTHES-LINE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 515,355, dated February 27, 1894. Application filed May 9, 1893. Serial No. 473,511. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MCNAB, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Adjustable Safety Clothes-Line Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in clothes line supports, particularly that class in which the adjustable safety arm, carrying the line carrying pulley, is secured outside the window and 20 may be extended within the window into the room so that the clothes may be hung upon the line without leaning out of the window.

It consists in the arrangement and combination of parts hereinafter described and 25 claimed.

My improvement is illustrated in the ac-

companying drawings in which-

Figure 1 is a perspective view of a device embodying my invention, showing the same 30 secured to the outside of the casing of the window and the safety arm extending within the room. Fig. 2 is an enlarged top plan view of the same. Fig. 3 is an enlarged side view of the device, certain portions thereof being 35 broken away. Fig. 4 is a side view of a bracket carrying a detachable pulley and a pivoted hook, which pulley and hook are designed to guide the clothes line and, when the arm is dropped from its elevated position 40 to prevent it from swinging inward against the window pane. Fig. 5, is an end view of the bracket carrying the line carrying pulley and of the spring pin adapted to secure said bracket to the adjustable arm. Fig. 6 is a 45 side view of a chain and ring adapted to hold the adjustable arm upward. Fig. 7 is an end view of the stay pin and its bracket which are adjustable on the adjustable arm. Fig. 8 is an end view of a bracket in which a 50 threaded bolt is pivoted, which bolt is adapted to secure the arm pivoted to the outside of the window easing and prevent its swinging. I

Fig. 9, is a top plan view of the bracket secured to the window sash, and adapted to receive the stay pin on the adjustable arm. Fig. 10 55 is a side view of the bolt and annularly grooved nut secured to the adjustable arm. Figs. 11 and 12 are diagrammatic views illustrating certain portions of the clothes line when the safety arm is respectively in use 60 and not in use. Fig. 13 is a top plan view of a modification of the device; Fig. 14 a side view of the same certain portions thereof being broken away. Fig. 14^a is a side view of a ing broken away. Fig. 14a is a side view of a modified form of detachable pulley bracket 65 in which the hook is rigidly fastened to the arm near the pulley bracket. Fig. 15 is an end view of a modified form of stay pin and bracket, in which the stay pin is pivotally secured to its bracket. Fig. 16 is a top plan 70 view, partly sectional, of a modification of the line carrying pulley bracket and of the pin securing the same to the adjustable arm, and Fig. 17 is a plan view of a modified form of the bracket secured to the window sash 75

and designed to receive the stay pin. In said drawings a represents the window

casing, to the outside of which a bracket or frame b is secured at a height sufficient to allow the adjustable arm hereinafter de-80 scribed to clear (when lowered) the sill of the window. To this frame b a supporting arm c is pivoted by a pin d, so as to swing horizontally in said bracket b. This supporting arm c has a central recess or slot e and is pro- 85 vided on its outer face with a series of notches or teeth c'. Through this slot e extends the threaded bolt f terminating at one end in the elbow f', which is pivoted as at f^2 to a bracket b', secured to the window casing at right an- 90 gles to the bracket b substantially as shown. (Figs. 2 and 8.) Upon this threaded bolt fand outside of the notched face c' of the arm c is placed a thumb nut g and washer g' and inside of the arm c is placed a nut g^2 , all ar- 95 ranged so that said arm c may be clamped between the washer g' and nut g^2 by thumb nut g to said bolt f. Pivoted near the end of the supporting arm cat right angles thereto and approximately parallel to the window 100 casing a is the adjustable arm h, constituting the adjustable support for the line carrying pulley. Attached to the end of said supporting arm c is a bracket i, carrying a detach-

able pulley i' adapted to be secured within said bracket i either at i² or i³ (see Figs. 3 and 4). At the lower end of said bracket i is Arranged also pivotally secured a hook j. 5 on the adjustable arm h is a slide bracket kcarrying at its upper end a stay pin m and adapted to be clamped at its lower end by means of thumb nut k' and bolt k^2 to the adjustable arm h (see Fig. 7). The stay pin m10 of this bracket k is adapted when the adjustable arm h is raised to enter the recess n' of a bracket n secured to the window sash a' (see Figs. 1 and 9). The adjustable arm h is also provided with a series of perforations o, 15 one of which is adapted to receive a bolt o¹⁶ which consists of a shank o^{14} , and base o' (see Fig. 10). The bolt is provided with the annularly growed nut o^{15} . On the adjustable arm h is also placed the sliding bracket o^5 , 20 adapted to be secured to said arm h by a spring pin o9, adapted to normally enter a hole or perforation o (see Figs. 1 and 5). This sliding bracket o^5 is provided with the projections or pulley bracket o7, within which 25 a pulley o8 is secured. This pulley o8 carries the clothes line R (see Figs. 11 and 12).

The spring pin o⁹ is surrounded by a case

 o^6 , slotted as at o^{11} , to expose the spring o^{10} , so that ice, dirt, &c., may be removed from 30 the spring to prevent elogging, as will be

manifest.

anifest. (See Fig. 5.) The arm h as shown in Fig. 1 is held in its raised position by means of a strap o³ provided at its lower end with a ring o^2 , adapted 35 to slip over the nut o^{15} of the bolt o^{16} , and furnished with a perforated end adapted to slip on or over a hook o4 attached to the inside of the window casing a.

Instead of the strap o3 I may use a chain 40 o^{31} furnished at its upper end with a perforated plate o^{12} adapted to slip on the hook o^4 and having a ring o² adapted to slip over the nut o^{15} , of bolt o^{16} , as shown at Figs. 2, 6 and 13.

In Figs. 13 to 17 I have illustrated a device 45 embodying a modified form of my invention. In this device the parts are substantially the same as those described above with the following exceptions: The bracket b' is connected to a hook shaped end f^5 of the thread-50 ed bolt f by a chain f^6 instead of as previously described through an elbow pivoted to said bracket b'. The arm c to which this threaded bolt is secured is not slotted. The sliding bracket k on the arm h has the stay pin mpivoted as at k^6 to the upper end of said bracket instead of integral therewith as heretofore described. There is also a spring k^3 placed around the bolt k^2 , all as shown in The bracket n is provided with an Fig. 15. 60 eye n^9 (instead of a recess) to receive the pivoted stay pin m (see Figs. 13 and 17). sliding bracket o^5 carrying the line pulley o^8 is secured in the modified form, to the adjustable arm h by a screw pin o^{17} furnished at its head with a crank o^{18} , as shown in Fig.

16. The hook j^2 is attached directly to the arm hinstead of to the pulley bracket i. (Fig. I leys is such that the arm cannot swing and

14^a.) When the pulley i' is attached to the bracket projections i^3 , the upper projections i^2 act as a guide for the rope to confine it to 70

the surface of said pulley i'.

The operation is as follows: It is to be understood that the clothes line passes over a pulley attached to a pole in the yard or to any support outside the window of the house. 75 After passing over this pulley the line passes into the house through the window and over the pulley o^8 secured to the end of arm h. It next passes under the pulley i' secured to the end of the arm c and from thence to the 80 outside pulley. The clothes are hung on the lower strand of the rope, that is to say, the strand below the arm h (see Fig. 11). The desired object in a clothes line support is that the pulleys o^8 , i' and the outside pulley 85 be arranged in the same plane. This is to allow the line to run freely and not bind on the edges of the pulleys and at the same time carries the strain of the line longitudinally with the arm. By my present inven- 90 tion I can align the pulleys very simply so that they will be in the same plane. The direction of the pulleys i' and o's is regulated by the support c and will align with the outdoor pulley by turning the arm h and sup- 95 port c around the pivot d in the bracket b, and then by screwing up the nuts on the bolt f the support c will be secured in a fixed position, and the alignment of the pulleys remain permanent. The bracket n may be se- 100 cured by screws or otherwise to the bottom rail of the window sash so that it will align with the pulleys i' and o^8 and to accommodate the opening or recess in said bracket n, the sliding bracket k may be moved backward 105 or forward on the arm h until the stay pin m engages the bracket n as above described. The arm h, when the clothes are to be attached to the rope R, is elevated, turning about the support c until it reaches its high- 110 est position being stopped when the stay pin m enters the bracket n on the window sash. The arm h is held in its elevated position by slipping the ring o^2 of the strap o^3 or chain o^{31} over the nut o^{15} , the other end of said strap 115 being held by the hook o4 secured to the window casing a. When the lower strand is removed from the hook j the line is ready for Should the rope stretch or sag the pulley os and its bracket may be moved along 120 the arm h until the rope is sufficiently taut. When the clothes are all hung upon the rope or are removed therefrom, the lower strand of the rope should be placed over the hook jand the arm dropped into a vertical position 125 so that the window may be closed if desired. When not in use the pulley bracket is slid up one or more holes on the arm h and this will instantly slacken the rope and prevent it from breaking in wet weather. While in its nor- 130 mal vertical position it is unnecessary to fasten the free end of the arm h as the contracting strain of the rope over the hook and pul515,355

strike the window but will remain stationary. When the line extends upward from the window to the outer support the detachable wheel should be placed in the upper projections so that the line will pass under it in order that it may not come in contact with the Where the line extends downwindow sash. ward from the window to the outer support the wheel should be placed between the lower 10 projections so that the line will run over it and the upper projection serve as a guide to keep the line in its place, it will thus be seen that in either case the wheel helps the line to run freely and that it acts as a guide to keep 15 the rope where it belongs and helps to align the rope with the outside pulley.

Having thus described my invention, what I claim as new, and desire to secure by Letters

1. The combination of a bracket secured to the outside of the window casing, a supporting arm pivoted in said bracket and adapted to swing horizontally therein, a main arm carrying the line carrying pulley and pivoted to 25 the end of said supporting arm, a pulley bracket secured to the free end of said supporting arm and provided with separate lugs designed to receive a detachable pulley wheel, with a hook pivoted at the lower end of said 30 pulley bracket and depending therefrom, all arranged so that said pulley wheel may be detached from one series of lugs and placed in the other to align the line carrying pulley of the main arm with the outside pulley, and 35 said hook is adapted to receive the clothes line when the main arm is dropped to prevent the arm from being thrown inward by the line against the window, substantially as described.

2. The combination of a main arm adapted to support an adjustable clothes line pulley, a bracket secured to the outside of the window easing, a supporting arm pivoted in said bracket and adapted to swing horizontally 45 therein, said main arm being pivotally secured to the end of said supporting arm, with a stay pin and bracket adjustably secured to said main arm, and sliding thereon, a bolt and nut secured to said main arm and with a hook se-50 cured to the inside of the window easing, a flexible support extending from said hook to said bolt and adapted to hold said main arm in an elevated position and with a bracket

secured to the window sash and adapted to 55 receive the stay pin to steady the free end of

the main arm from side movement, substan-

tially as described.

3. The combination of the bracket b, a supporting arm c pivoted to swing horizontally therein and having an outer notched face c', 60 a bracket b' arranged at right angles to said bracket b, a threaded bolt f pivoted to said bracket b' and means for clamping said supporting arm c to said bolt f, a perforated arm h pivoted to the free end of said supporting 65 arm c and adapted to swing at right angles. thereto, a sliding bracket o⁵ carrying the line pulley o^8 sliding on said arm h and adapted to be secured thereto by a pin entering the perforations of said arm h, a nut o15 secured 70 to said arm, a sliding bracket k adapted to be secured on said arm h and carrying a stay pin m, a bracket n secured to the inside window sash and adapted to receive the stay pin m, and a strap for securing said arm h, 75 through nut o15, in its horizontal position, to the inside of a window casing, substantially

as described.

4. The combination of the bracket b, a supporting arm c pivoted to swing horizontally 80 therein and having an outer notched face c'a bracket b' arranged at right angles to the bracket b, a threaded bolt f pivoted to said bracket b' and means for clamping said bolt f to said supporting arm c, a perforated arm 85 h pivoted to the free end of said supporting arm c and adapted to swing at right angles thereto, a sliding bracket o carrying the line carrying pulley o^8 , sliding on said arm h and adapted to be secured thereto by a pin, car- 90 ried by said bracket, which enters the perforations of said arm h, a nut o^{15} , secured to said arm h, a sliding bracket k adapted to be secured on said arm h and carrying the stay pin m, a bracket n secured to the window 95 sash and adapted to receive the stay pin m, with a strap for securing said arm h, through nut, o^{15} , to the window casing in a horizontal position and a pulley bracket i carrying a detachable pulley i' and hook j, secured to 100 the end of the supporting arm c, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this the 26th day of April, 1893.

ROBT. McNAB.

Witnesses:

WM. D. BELL, HENRY E. EVERDING.